

CLAIMS

What is claimed is:

1. A method for managing the planning and performance of multiple projects, the multiple projects comprising one or more projects that are identified as a mandatory type, one  
5 or more projects that are identified as nonmandatory type, and one or more projects of an ad hoc type that arise intermittently and are subject to change, the method comprising:  
calculating a number of working hours available for performance of the multiple projects;  
estimating the time required for completion of each project;  
based on said time estimates, allocating a first amount of time for performance of said mandatory  
10 projects, allocating a second amount of time for performance of said ad hoc projects, and  
allocating a third amount of time to be held in reserve, wherein the sum of the first, second, and third amounts of time is less than or equal to said available hours;  
assigning tasks associated with the projects for performance;  
periodically inputting an actual time spent in performing the projects and a current status of each  
15 project;  
based on the actual time spent and current status for each project, reestimating the time required for completing each project;  
for each project type, determining if there exists a time imbalance between the allocated time for completion and the reestimated time for completion; and  
20 if there exists a time imbalance, reallocating the first, second, and third amounts of time to eliminate the time imbalance.

2. The method of claim 1, wherein each project comprises one or more identified tasks, the estimating step including estimating the time required for completion of each of said identified tasks and storing the estimates for each task in a database.

25 3. The method of claim 1, wherein the estimating step is based on previously performed tasks of a similar nature.

4. The method of claim 1, further including logging positive and negative time imbalances for future estimates.

5. The method of claim 1, wherein the assigning step includes assigning to a worker tasks associated with mandatory projects and tasks associated with ad hoc projects.

5 6. The method of claim 1, wherein the calculating step includes determining a total supply of work hours and subtracting an estimated number of hours for nonproduction activities.

7. The method of claim 1, wherein a negative time imbalance is eliminated by decreasing the allocation for the time held in reserve.

10 8. The method of claim 1, wherein a positive time imbalance is eliminated by increasing the allocation for the ad hoc projects.

9. The method of claim 1, wherein a positive time imbalance is eliminated by re-identifying one or more nonmandatory projects as mandatory projects and increasing the allocation for the mandatory projects.

15 10. The method of claim 1, wherein a positive time imbalance is eliminated by increasing the allocation for the time held in reserve.

11. The method of claim 1, wherein a positive time imbalance is eliminated by establishing an earlier estimated completion date for one or more projects.

20 12. The method of claim 1, wherein:  
if there exists any negative time imbalance, reallocating the first, second, and third amounts of  
time to eliminate any negative time imbalance; and  
if there exists any positive time imbalance, performing one or both of:

reallocating the first, second, and third amounts of time to eliminate any positive time imbalance;  
and  
re-identifying one or more nonmandatory projects as mandatory.

13. An information handling system, comprising:

5 a processing system; and

a project planning and management system interconnected with said processing system, the  
project planning and management system for managing the planning and performance of  
multiple projects, the multiple projects comprising one or more projects that are identified  
as a mandatory type, one or more projects that are identified as nonmandatory type, and  
10 one or more projects of an ad hoc type that arise intermittently and are subject to change,  
the project planning and management system configured to:

calculate a number of working hours available for performance of the multiple projects;

estimate the time required for completion of each project;

based on said time estimates, allocate a first amount of time for performance of said mandatory  
15 projects, a second amount of time for performance of said ad hoc projects, and a third  
amount of time to be held in reserve, wherein the sum of the first, second, and third  
amounts of time is less than or equal to said available hours;

record assignments of tasks associated with the projects for performance;

periodically receive input of an actual time spent in performing the projects and a current status  
20 of each project;

reestimate, based on the actual time spent and current status for each project, the time required  
for completing each project;

determine, for each project type, if there exists a time imbalance between the allocated time for  
completion and the reestimated time for completion; and

25 if there exists a time imbalance, reallocating the first, second, and third amounts of time to  
eliminate the time imbalance.

14. The information handling system of claim 13, wherein each project  
comprises one or more identified tasks, and further wherein the project planning and management

system is configured to estimate, for each project, the time required for completion of each of said identified tasks and to store the estimates in a database.

15. The information handling system of claim 13, wherein the project planning and management system is configured to estimate the time required for completion of each project based on previously performed tasks of a similar nature.

16. The information handling system of claim 13, wherein the project planning and management system is configured to log positive and negative time imbalances.

17. The information handling system of claim 13, wherein the project planning and management system is configured to record assignments of tasks associated with mandatory projects and tasks associated with ad hoc projects to a worker.

18. The information handling system of claim 13, wherein the project planning and management system is configured to calculate the number of working hours available by determining a total supply of work hours and subtracting an estimated number of hours for nonproduction activities.

19. The information handling system of claim 13, wherein the project planning and management system is configured to eliminate a negative time imbalance by decreasing the allocation for the time held in reserve.

20. The information handling system of claim 13, wherein the project planning and management system is configured to eliminate a positive time imbalance by increasing the allocation for the ad hoc projects.

21. The information handling system of claim 13, wherein the project planning and management system is configured to eliminate a positive time imbalance by re-identifying one

or more nonmandatory projects as mandatory projects and increasing the allocation for the mandatory projects.

22. The information handling system of claim 13, wherein the project planning and management system is configured to eliminate a positive time imbalance by increasing the allocation for the time held in reserve.

23. The information handling system of claim 13, wherein the project planning and management system is configured to eliminate a positive time imbalance by establishing an earlier estimated completion date for one or more projects.

24. The information handling system of claim 13, wherein the project planning and management system is configured to:  
if there exists any negative time imbalance, reallocate the first, second, and third amounts of time to eliminate any negative time imbalance; and  
if there exists any positive time imbalance, perform one or both of:  
reallocate the first, second, and third amounts of time to eliminate any positive time imbalance;  
and  
re-identify one or more nonmandatory projects as mandatory.

25. A planning system for the planning and management of multiple projects, the multiple projects comprising one or more projects that are identified as a mandatory type, one or more projects that are identified as nonmandatory type, and one or more projects of an ad hoc type that arise intermittently and are subject to change, the system comprising:  
an input means for entering project information and task information associated with each project, the project information identifying each project as being of a mandatory, nonmandatory, or ad hoc type, and the task information describing each task to be performed by users of the system and an estimated duration of each task;  
a work hour calculator for calculating a number of working hours available for performance of the multiple projects;

an allocation engine for allocating a first amount of time for performance of said mandatory projects, a second amount of time for performance of said ad hoc projects, and a third amount of time to be held in reserve, wherein the sum of the first, second, and third amounts of time is less than or equal to said available hours;

- 5 a schedule preparation engine for preparing a schedule of tasks for performance, the schedule comprising an estimated time for the performance of each task;
- a time tracking system for recording actual time spent in performing the projects and a current status of each project;
- a time imbalance calculator for detecting a difference between actual time spent in performance  
10 of the projects and the estimated time for performance of the projects; and
- an allocation modification engine for reestimating the time required for completing each project based on the actual time spent and current status for each project and reallocating time to eliminate any time imbalance detected by the time imbalance calculator.

26. The planning system of claim 25, wherein the estimated time required for  
15 completion of each task is based on previously performed tasks of a similar nature.

27. The planning system of claim 25, wherein the schedule preparation engine schedules tasks associated with mandatory projects and tasks associated with ad hoc projects to a worker.

28. The planning system of claim 25, wherein the work hour calculator  
20 calculates the number of working hours available by determining a total supply of work hours and subtracting an estimated number of hours for nonproduction activities.

29. The planning system of claim 25, wherein the allocation modification engine is configured to eliminate a negative time imbalance by decreasing the allocation for the time held in reserve.

30. The planning system of claim 25, wherein the allocation modification engine is configured to eliminate a positive time imbalance by increasing the allocation for the ad hoc projects.

5 31. The information handling system of claim 25, wherein the allocation modification engine is configured to eliminate a positive time imbalance by re-identifying one or more nonmandatory projects as mandatory projects and increasing the allocation for the mandatory projects.

10 32. The information handling system of claim 25, wherein the allocation modification engine is configured to eliminate a positive time imbalance by increasing the allocation for the time held in reserve.

33. The information handling system of claim 25, wherein the allocation modification engine is configured to eliminate a positive time imbalance by establishing an earlier estimated completion date for one or more projects.